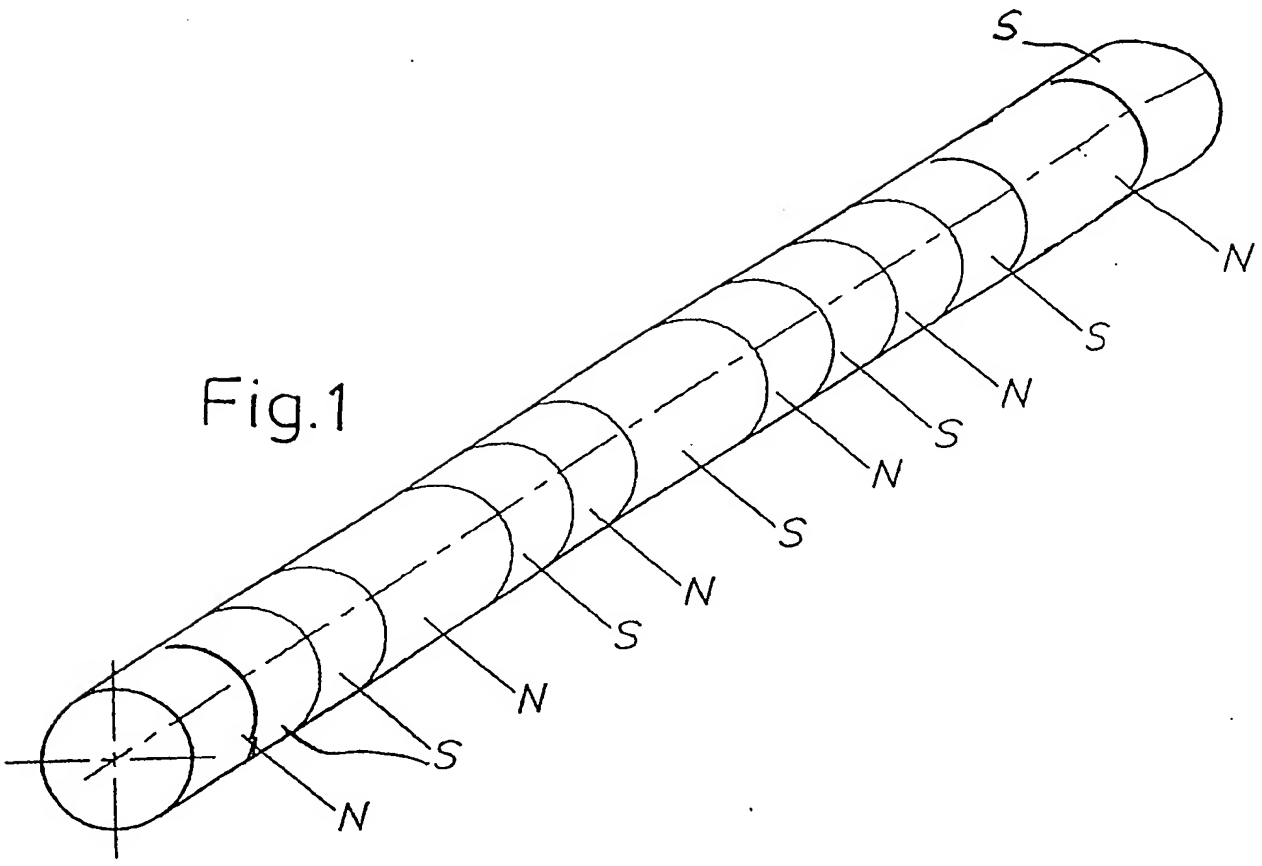


Fig.1

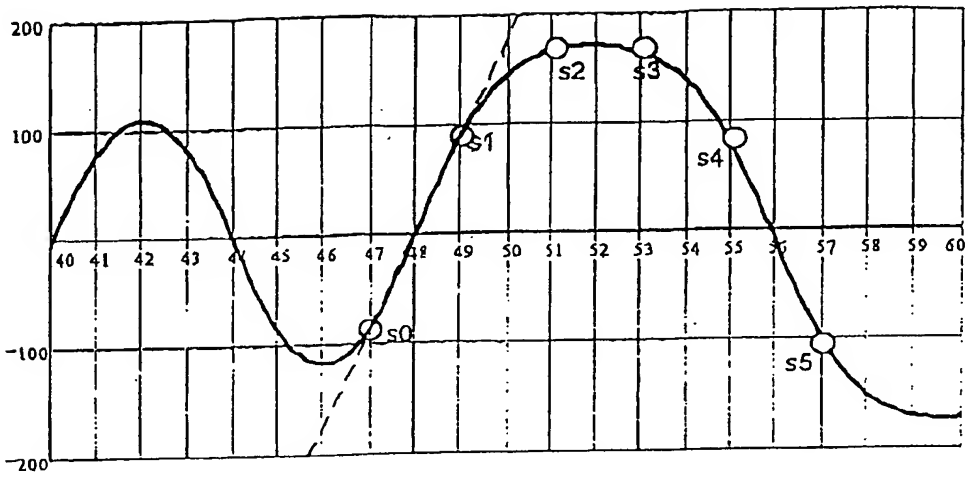
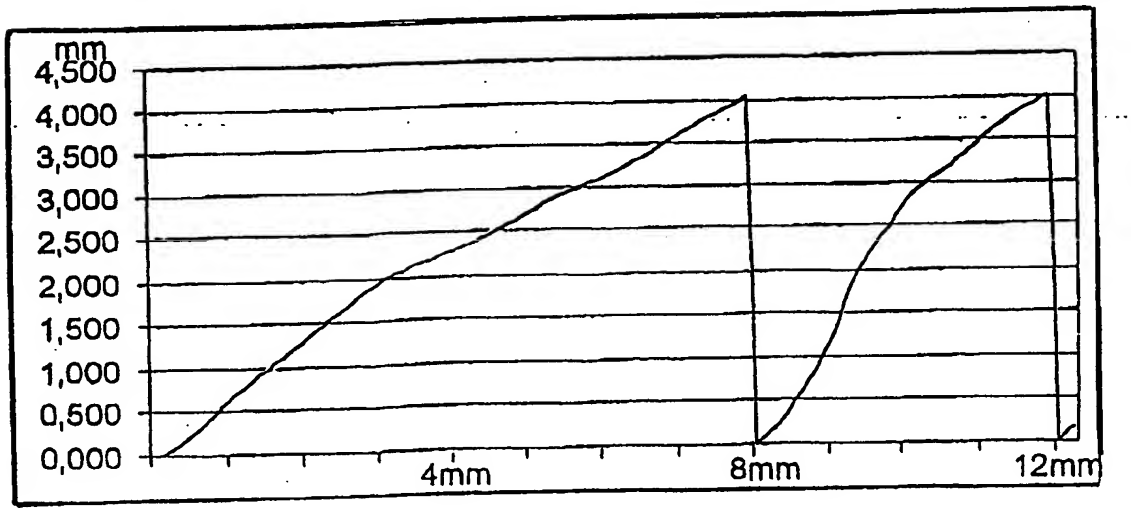


Fig. 2

$U_0(s0) = -86.1738191237\,mV$ $U_0(s1) = 90.53382374\,mV$

U(s0)>0	-> 0
U(s0)+1/3*U(s1)>0	-> 0
U(s0)+U(s1)>0	-> 1
1/3*U(s0)+U(s1)>0	-> 1
U(s1)>0	-> 1
u.s.w. ... to:	
U(s4)+1/3*U(s5)>0	->1

Fig.3



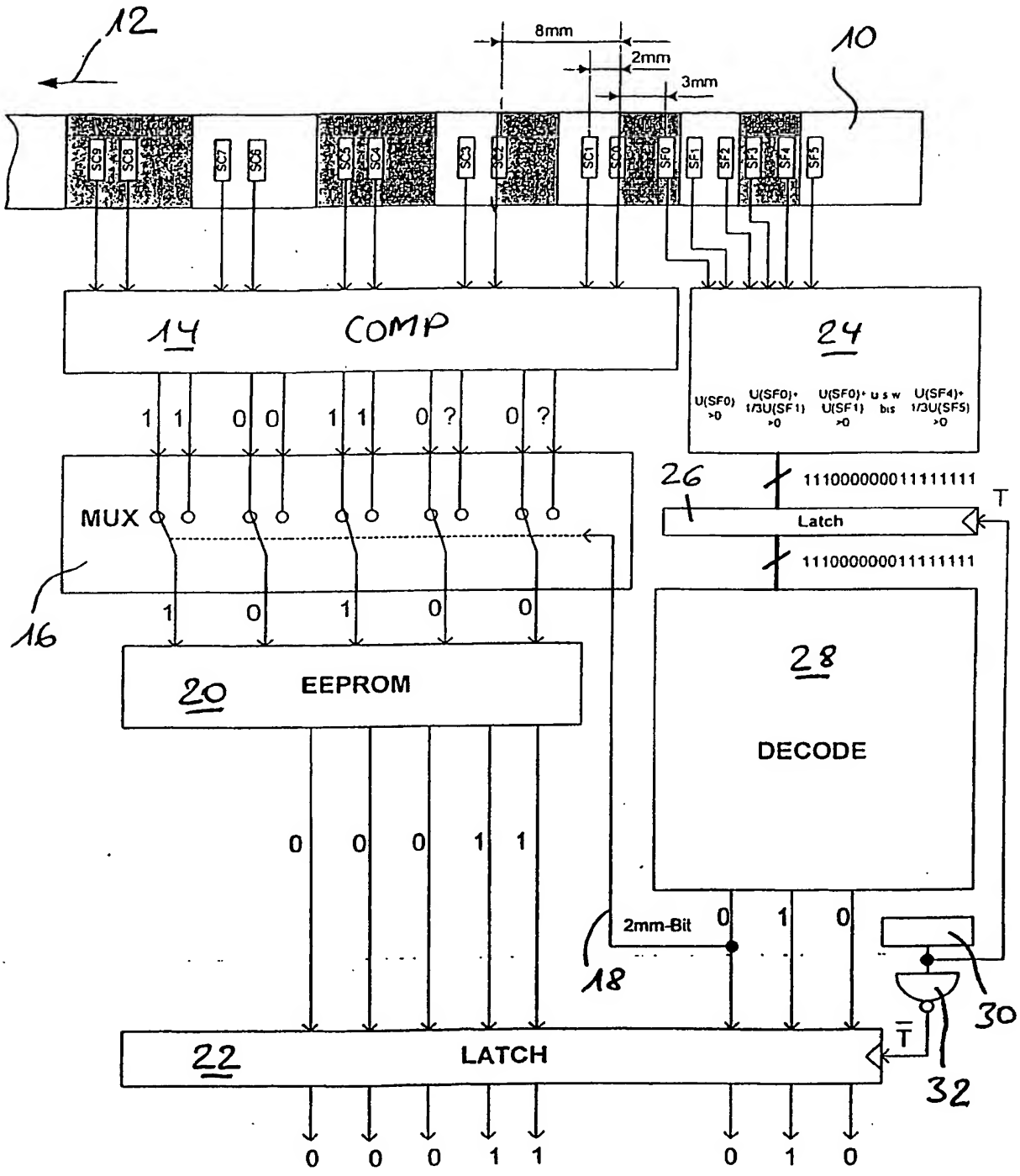

12
8mm
2mm
3mm
10
SC9
SC8
SC7
SC6
SC5
SC4
SC3
SC2
SC1
SC0
SF0
SF1
SF2
SF3
SF4
SF5
14
COMP
24
U(SF0) >0
U(SF0)+ 1/3U(SF1) >0
U(SF0)+ U(SF1) >0
u.s.w bis
U(SF4)+ 1/3U(SF5) >0
1 1 0 0 1 1 0 ? 0 ?
26
111000000011111111
T
Latch
111000000011111111
MUX
16
1 0 1 0 0
20
EEPROM
28
DECODE
0 0 0 1 1
2mm-Bit
0 1 0
18
30
T
22
LATCH
32
0 0 0 1 1
0 1 0

Fig. 4

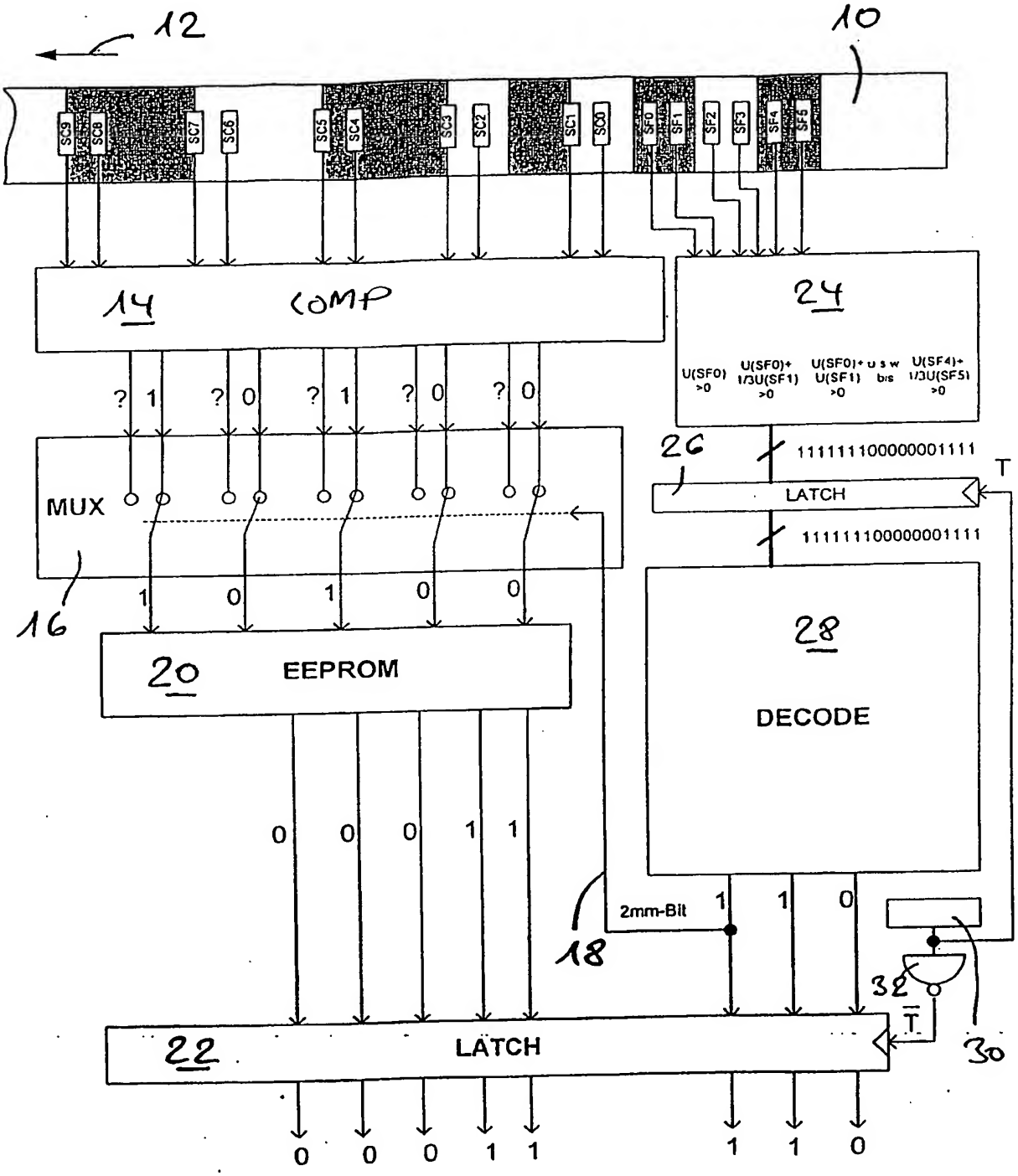

12
10
SC9
SC8
SC7
SC6
SC5
SC4
SC3
SC2
SC1
SC0
SF0
SF1
SF2
SF3
SF4
SF5
14
COMP
24
U(SF0) >0
U(SF0)+ 1/3U(SF1) >0
U(SF0)+ U(SF1) >0
U(SF4)+ 1/3U(SF5) >0
? 1 ? 0 ? 1 ? 0 ? 0
26
111111100000001111
T
LATCH
111111100000001111
MUX
16
1 0 1 0 0
28
DECODE
20
EEPROM
0 0 0 1 1
2mm-Bit
1 1 0
18
32
T
30
22
LATCH
0 0 0 1 1
1 1 0

Fig. 5

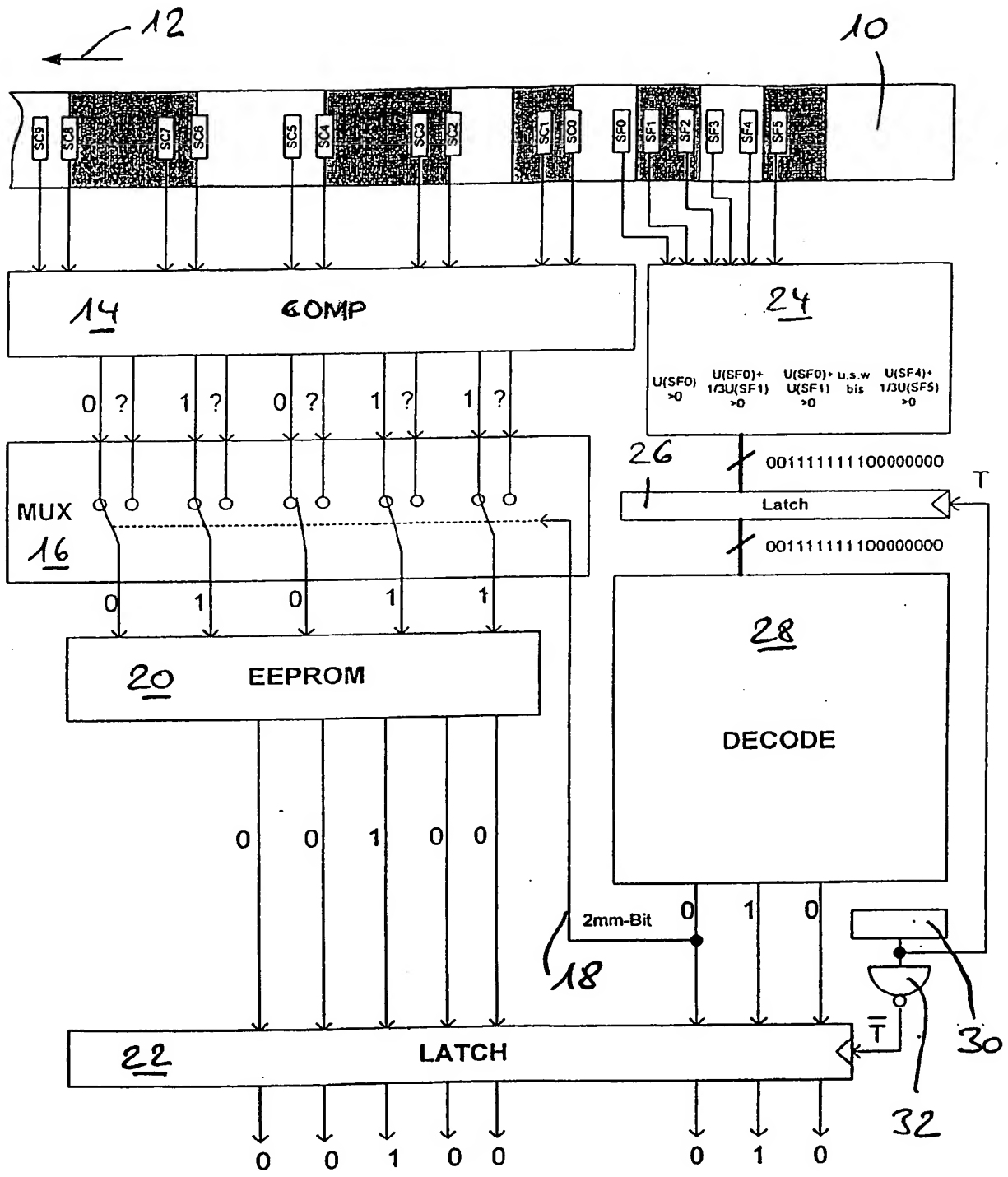

12
10
SC9
SC8
SC7
SC6
SC5
SC4
SC3
SC2
SC1
SC0
SF0
SF1
SF2
SF3
SF4
SF5
14
COMP
24
U(SF0) >0
U(SF0)+ 1/3U(SF1) >0
U(SF0)+ U(SF1) >0
u.s.w bis
U(SF4)+ 1/3U(SF5) >0
0 ? 1 ? 0 ? 1 ? 1 ?
26
0011111111100000000
T
Latch
0011111111100000000
MUX
16
0 1 0 1 1
28
DECODE
20
EEPROM
0 0 1 0 0
2mm-Bit
0 1 0
18
T
30
22
LATCH
32
0 0 1 0 0
0 1 0

Fig. 6

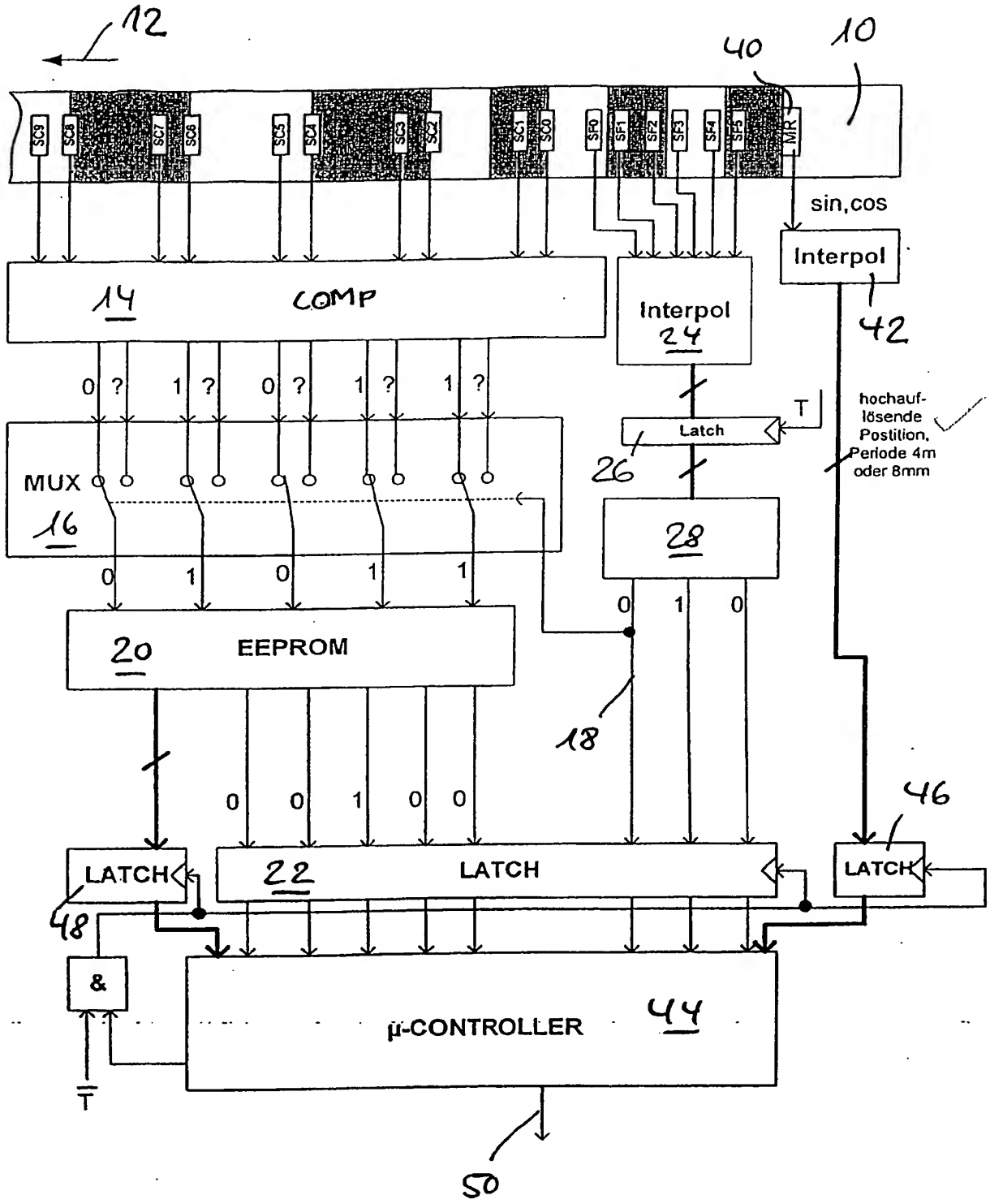

12
40
10
SC9
SC8
SC7
SC6
SC5
SC4
SC3
SC2
SC1
SC0
SF0
SF1
SF2
SF3
SF4
SF5
MR
sin,cos
Interpol
14
COMP
Interpol
24
42
0 ? 1 ? 0 ? 1 ? 1 ?
T
Latch
hochauf-
lösende
Postition,
Periode 4m
oder 8mm
26
MUX
16
28
0 1 0 1 1
0 1 0
20
EEPROM
18
0 0 1 0 0
46
LATCH
22
LATCH
LATCH
48
&
µ-CONTROLLER
44
T
50

Fig. 7

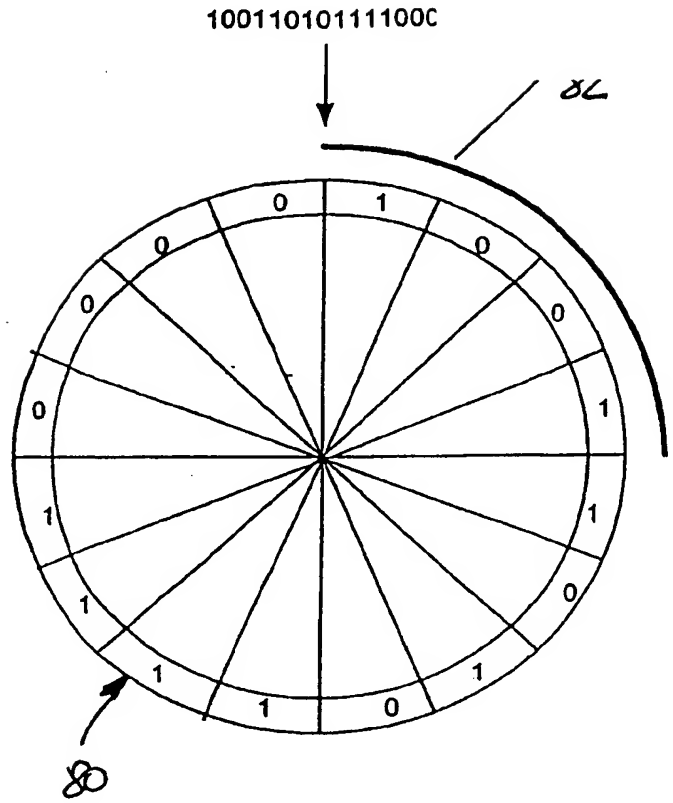


Fig.9

code	position
1001	0
0011	1
0110	2
1101	3
1010	4
0101	5
1011	6
0111	7
1111	8
1110	9
1100	10
1000	11
0000	12
0001	13
0010	14
0100	15

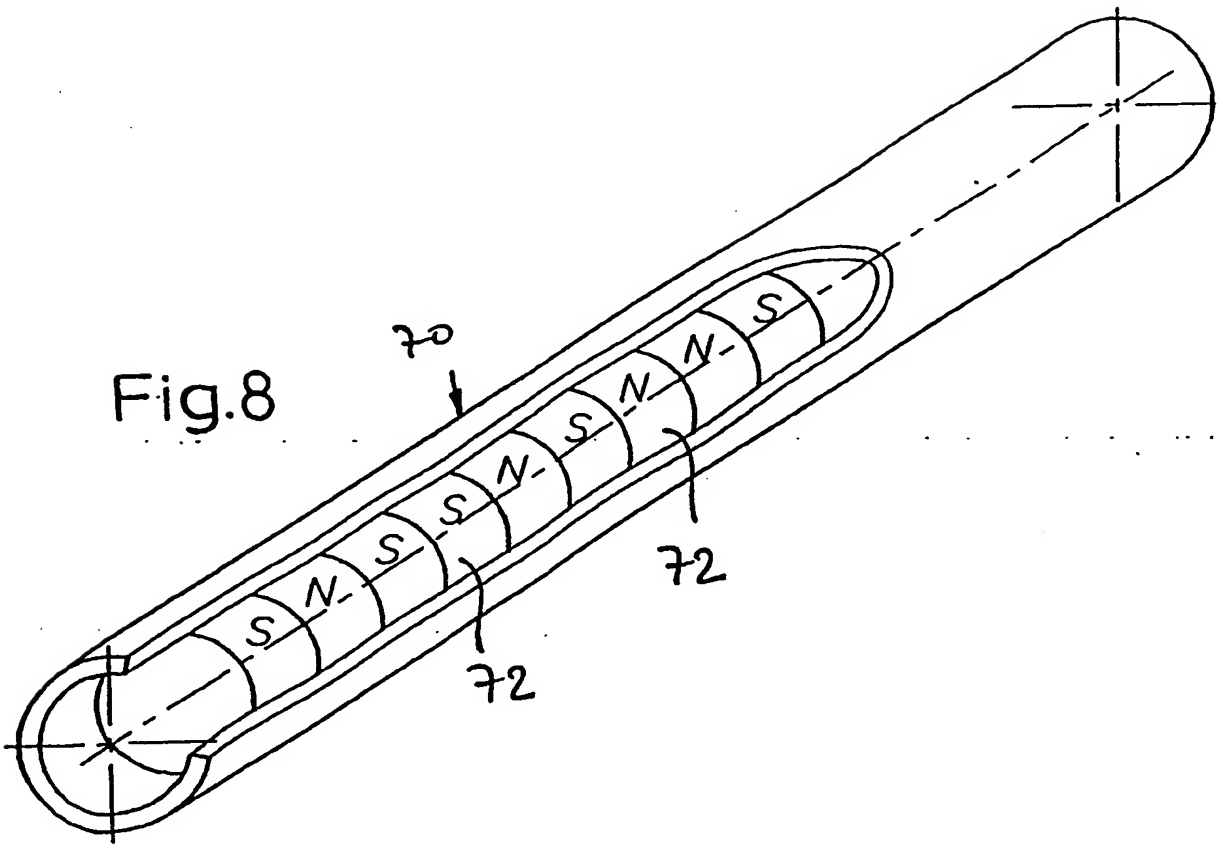


Fig.8